

JULY
1956

- REPORT OF FIRST T.V.I. FIELD TEST
- R.D. CONTEST RULES
- CONVERTING SCR522 GENEMOTOR TO 12 VOLT OPERATION

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EDITORIAL



THE AMATEUR IS A GENTLEMAN

When, following the Fall of Rome, the barbarian hordes enveloped the civilised world, much of the order and culture painstakingly built up over centuries was lost. The Dark Ages had arrived.

However, out of the turmoil that followed, there emerged a system of living which endeavoured to bring to men a better understanding of the problems of others. Though the strength of "ye strong right arm" was forever to be seen, the code of chivalry did much to improve the lot of men. As a result of being honourable, courteous, loyal, just and brave, the term of "Gentleman" was coined and proudly owned.

But it is a far cry from the knight on the lists at Ashby-de-la-Zouch to the Amateur in his shack in Sydney, Melbourne or elsewhere. Or is it?

Though time has passed, the term Gentleman still remains. Point number one in the Amateur's Code is "The Amateur is Gentlemanly. He never uses the air for his own amusement in such a way as to lessen the pleasure of others. He abides by the terms of his licence."

It is therefore important, that from time to time, we take stock of our actions in relation to the term "Gentleman." What of that section of the band for c.w. only? What of listening on the frequency before transmitting? What of allowing others to work that "rare one" by making a short contact?

THESE AND MANY OTHERS ARE THE ACTIONS OF A GENTLEMAN.

FEDERAL EXECUTIVE.

WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of fifteen minutes after, the official broadcasts.

VK5WI: Sundays, 1100 hours EST. 7146 Mc. and 2000 hours EST. 56.6 and 144 Mc. No frequency checks available from VK5WI. Intrastate working frequency 7135 Mc.

VK5WI: Sundays, 1130 hours EST, simultaneously on 5575 and 7146 Mc. Mc. 56.6 and 145.25 Mc. Intrastate working frequency 7135 Mc. Individual frequency checks of Amateur Stations given when VK5WI is on the air.

VK5WI: Sundays, 0900 hours EST, simultaneously on 5560 and 14342 Mc. Mc. 5669 Mc. channel is used from 0915 hours to 1015 hours each Sunday for the W.I.A. Country hook-up. No frequency checks available.

VK5WI: Sundays, 0930 hours WAST, on 7146 Mc. No frequency checks available.

VK5WI: Sundays, at 1000 hours EST, on 7146 Mc. and 2672 Mc. No frequency checks are available.

VK5WI: Sundays, 1000 hours EST, simultaneously on 3.5, 7, 14 and 144 Mc. Individual frequency checks of Amateur Stations given when VK5WI is on the air.

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REPORT OF THE FIRST T.V.I. FIELD TEST

BY FIVE MEMBERS OF THE H.F. T.V.I. COMMITTEE OF N.S.W. DIVISION OF THE W.I.A.

EQUIPMENT USED

The v.h.f. receiver, built by VK2AOU, had the following circuit: 6AK5 triode connected as grounded grid amplifier (to prevent radiation by the following stage), triode 6AK5 superregenerative detector incorporating a Colpitt's hot cathode oscillator, 0-1 Ma. meter in the plate circuit (bridge) to compare field strength, 12AT7 twin triode as two-stage audio amplifier to identify signals received, and headphones.

The receiver was battery operated and portable. Ranges: 59-70 Mc., 83.4-99.7 Mc., 129-156.8 Mc., and 168-205.6 Mc.

FIRST TEST

The transmitter was the station of VK2AOU, which was described in "Amateur Radio," November, 1955, to January, 1956. On 14 Mc. and 21 Mc. it is an eight stage and on 28 Mc. a nine stage transmitter with fixed tuned band filters between the frequency multipliers and also between the driver and final. The final used a pi-tank followed by a low pass filter (described in November, 1955, "A.R.") and a multi-band antenna coupler. The transmitter was running with 100 watts input and a three element miniature beam, 44 ft. high, was connected. The sound of a clock was used for 100% modulation.

14 Mc. Tests: Near the transmitter the harmonics were weaker than the output of a small g.d. meter. With the p.a. off, nothing was heard in other rooms or underneath the beam. The next check was made outside the house, 20 yards away from the transmitter and beam. The only harmonics heard in the range covered by the receiver were the 5th and the 6th.

The 5th was right in the noise of the receiver and had only 0.05 times the field strength of the Sydney 92.1 Mc. v.h.f. fm. transmitter.

The 6th harmonic was near the v.h.f. taxi signals which were not disturbed by the harmonic, because the taxi stations were much stronger. This 6th harmonic had about 0.1 times the field strength of the fm. radio station.

There were no harmonics on higher frequencies or within t.v. channels. Even the 6th harmonic disappeared 50 yards away from the transmitter.

Further tests showed that the directivity of the beam had no effect on the harmonic radiation.

28 Mc. Test: The second check was carried out with the transmitter running on 28 Mc. Outside the house, 20 yards away from the transmitter, the third harmonic had the same strength as the fm. radio station, but this signal was outside any t.v. channel, and Sydney t.v. stations will have a 10 to 30 times greater effective radiated power working from nearly the same location. The distance between the fm. station and our test location was about 11 miles. There was no direct line of sight to the fm. transmitter.

There were no higher order harmonics available outside the house (5th, 6th and 7th for example). The 2nd and 4th harmonics were not covered by this receiver.

The beam was two wave lengths from and parallel to the mains line, and this was apparently the reason why the third harmonic was detected weakly in the receiver noise for about 50 yards. The last signs disappeared at a distance of 100 yards. This happened also as soon as the car went in a side lane away from the mains line.

The low pass filter was later removed and the receiver meter was reading 100 times the field strength of the third harmonic in front of the house, as could be expected.

Conclusion: This Amateur Station is not likely to cause t.v.i. due to harmonic radiation. The suppression of harmonics is in the order of 100 db. or more. Even this very simple receiver, with only one tuned circuit, was not overloaded by the transmitter.

A short rod was used as the receiver antenna, about 6 feet above ground. Therefore the very much stronger t.v. stations should give satisfactory reception with indoor antennae near this location over a distance of 11 miles. Any interference resulting from the operation of this Amateur Station must be therefore the result of faulty t.v. receiver design (chassis not shielded, insufficient front-end rejection of signals near the t.v. i.f., 28-30 Mc. Amateur signals), or faulty t.v. set alignment.

It is entirely the responsibility of the t.v. set manufacturer and/or the service man to fix the trouble.

SECOND TEST

The transmitter was the uncompleted new station of VK2FA. The essential t.v.i. proofing additions are not yet incorporated. It is a commercial v.f.o. driver with Geloso pi-tank circuit, p.a. with pi-tank circuit, with a full size two element beam. The transmitter was shielded and then placed in a further shielding cabinet.

Again no harmonics were heard outside the house with the p.a. stage off. The distance to the fm. radio station was only 5½ miles, and there was nearly a direct line of sight, therefore the field strength was about 100 times stronger than at VK2AOU's place (Beverly Hills). The meter of the receiver has a logarithmic sensitivity in this super-regen. operation manner, as was found with a calibrated signal generator. A signal just visible on the meter (in the receiver noise) gave 6° deflection with 10 times and 12° deflection with 100 times the input voltage.

Working on 14 Mc. only, the result was: Harmonics below the 6th were not covered by the receiver (fundamental near 14.3 Mc.) The 6th had about 1,000 times the field strength as of VK2AOU's transmitter, and was equal to the fm.

station, a result which must be expected because the antenna coupler may reduce the harmonics by 20 db. at least, and the low pass filter by a further 40 to 60 db.

The 7th harmonic of VK2FA's transmitter was only 0.05 times as strong as the 6th. No higher order harmonics were detected. There was a weak signal from this transmitter near 61 Mc. which must have been a mixing product of the 4th harmonic plus the fairly strong 3.5 Mc. signal of the v.f.o., because this type of v.f.o. has a high output, but not much selectivity, and the two pi networks are not sufficient. The 7th harmonic disappeared at a distance of 150 to 200 yards. The 6th harmonic was just no longer heard at a distance of 350 to 400 yards.

This test was on a road which was about level with the beam, whilst on the low side of the road 100 yards were enough to make the 6th harmonic unheard.

Conclusion: The selectivity of the v.f.o. should be increased to prevent all harmonics of the 3.5 Mc. v.f.o. reaching the driver and p.a. An antenna coupler and a low pass filter will have to be added as is intended. A three section low pass filter may be sufficient for a 100 watt input transmitter. But even with the transmitter as it is now, at five miles distance with nearly a line of direct sight to the t.v. location, the t.v. signal may be strong enough to prevent t.v.i.

It may be mentioned that the 2nd harmonic of a taxi v.h.f. station, which was 1½ miles away, was just as strong as the 6th harmonic of VK2FA's transmitter 50 yards away from his station. The taxi station's 2nd harmonic was near 168 Mc.

Driving through Sydney and suburbs several tests were made to see the variation of the strength of fm. radio and taxi stations. The interference from trams and some cars was very bad on the main roads.

—Hans Ruckert, VK2AOU

BOOK REVIEW

THE RADIO AMATEUR OPERATOR'S HANDBOOK

This is quite a useful little publication, a wealth of information is contained in the 48 pages.

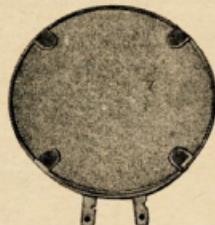
It contains lists of prefixes, zones, call areas, Q and Z codes, and QSL Bureaux along with some sound advice on operating technique. In the words of the preface, "A copy in your shack will save much time." Both licensed operators and s.w.l.'s will find this a very useful publication. It should be noted that the addresses for the VK3, VK5, and VK7 QSL Bureaux have, since publication, been changed.

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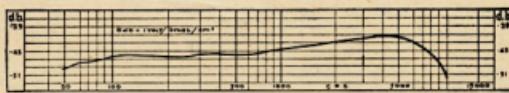
When mounted in a microphone cage, it is recommended that the insert be suspended in rubber, to eliminate shock and vibration.

One of the connecting lugs is directly connected to the case and care should be taken to solder the metal shield of the microphone cable to this solder lug, keeping the unshielded portion of the centre conductor as short as possible to eliminate hum pick-up.

All crystal elements are mounted on high grade suspension pillars, being fixed thereto with a good quality cement, thus ensuring stability and long life.

Case 1 1/2" diameter (rear), 3/8" thickness, 1-13/16" overall diameter (front) with filter fitted.

Frequency Response = 60-6,500 c.p.s.
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REMEMBRANCE DAY CONTEST, 1956

The Remembrance Day Contest is an Australian annual contest to perpetuate the memory of those Australian Amateurs who gave their lives for their country during World War II. It is held on the week-end nearest to the 15th August in each year, the date on which the hostilities ceased in the S.W.P.A.

A Handsome Perpetual Trophy is awarded annually for competition between States, inscribed with the names of those who made the supreme sacrifice, and so perpetuating their memory throughout Amateur Radio in Australia. The name of the winning State each year is also inscribed on the Trophy.

For the purpose of the R.D. Contest all Amateurs within the Australian Capital Territory (VK1) are to be regarded as operating in VK2 Call Area with regard to Rules, Scoring, Return of Logs. All Awards will also be under the same conditions until such time as Federal Council agrees for it to be otherwise.

Again this year Amateurs in the VK1 Antarctica Call Areas can participate in the Contest. Scoring for contacts with VK1 (Antarctica) remain the same, namely, six points per contact per band for all States for contacts with VK1 (Antarctica).

RULES

1. The Contest will commence at 1800 hours E.A.S.T. on 11th August and continue through until 1759 hours on 12th August.

2. The Contest is open to all Australian Amateurs, but only members of the W.I.A. are eligible for the awards.

3. During the Contest, c.w., phone, or a combination of both may be used.

4. The Contest is an Interstate Contest, and Amateurs in each State will endeavour to contact Amateurs in all other States.

5. A station may be operated by more than one operator under the station call sign provided that operators, other than the station licensee, submit a separate log under his own call sign for contest purposes.

To implement this rule, the following procedure shall be adopted by all licensees other than owners of the station concerned.

(a) Licensees operating stations other than their own shall, for the purpose of these rules, be hereinafter referred to as "substitute operators."

(b) **Phone Contacts:** Substitute operators will call "CQ Remembrance Day," followed by the call sign of the station they are operating, and the word "log" followed by their own call sign.

(c) **C.W. Stations:** Substitute operators will call "CQ RD de" followed by a group call sign comprising the call sign of the station they are operating, an oblique stroke, and their own call sign.

(d) **Receiving Contestants:** Contestants receiving signals from substitute operators will qualify for points by recording the call sign of the substitute operator only (i.e. the last call sign).

(e) Nothing in (a), (b) or (c) above will preclude the station licensee from participating in the contest himself,

providing he submits a separate log under his own call sign.

6. All existing Amateur bands may be used, and all transmissions must conform with the Regulations as laid down in the P.M.G.'s "Handbook for the Guidance of Operators of Amateur Wireless Stations." Any breaches of these will lead to the disqualification of the operator concerned.

7. The arrangements of schedules for contacts on other bands will not be permitted.

8. All stations entering the Contest will call "CQ RD" if using c.w., and "CQ Remembrance Day" if using phone, subject to rules governing substitute operators under rule 5 (a), (b), and (c) above.

9. A State competing for the Trophy must submit a minimum of six (6) logs from financial members before becoming eligible for contesting the Trophy.

10. Only one contact per station per band is permitted.

11. **Serial numbers** to be exchanged during the Contest will be as follows:—

(a) For C.W. the first three figures will be the RST (telegraphy) report followed by the serial number of the contact commencing with any number between 001 and 100 for the first contact and increasing in value by one (1) for each successive contact. If any contestant reaches 999, he will then commence 001 and continue 002, 003, 004, etc.

(b) For Phone the first two figures will be the RS (telephony) report, followed by the serial number of the contact commencing with any number between 001 and 100 for the first contact and increasing in value by one (1) for each successive contact. If any contestant reaches 999, he will then commence 001 and continue 002, 003, 004, etc.

A complete exchange of serial numbers must take place before any points may be claimed for the contact.

12. In order that an equitable distribution of points for States with a large number of contestants compared with a State with fewer contestants may be determined, a sliding scale of points has been allotted as shown in the scoring table appended.

13. In addition to the points in the scoring table that may be scored by a contestant, a bonus of 25 points may be added to the total score for each State worked on 56 Mc. or above.

14. The log submitted must show in the following order: Date, time, band, emission, call sign, RST/No. sent, RST/No. received, points claimed. No log will be accepted unless laid out in this order.

15. A statement signed by the operator must be attached at the conclusion of the log stating that the Regulations (Rule 6) and these Rules have been observed. Any logs departing from this form will automatically be disqualified.

16. All logs must be forwarded through the Contestant's Divisional Council (for membership checking) to reach the Federal Contest Committee, Box 1234K, G.P.O., Adelaide, on or before 8th September, 1956.

17. Attractive certificates will be awarded to the winners of the phone, c.w., and open sections in each State; there will be no outright winner for Australia. Where a large number of logs are received from any one State, further certificates may be awarded at the discretion of the Contest Committee.

A contestant is deemed to have entered for the "open" section if his log reveals that he has, during the Contest period, made valid contacts on both phone and c.w.

18. The State to which the Perpetual Trophy will be awarded shall be determined as follows:—

To the average of the top six (6) logs shall be added a bonus arrived at by multiplying this average by the ratio of valid logs submitted by that State to the total of Amateur Licensees in the Division at the time of the Contest.

Example: Total points equals—
No. of Logs
Aver. Score { 1 plus $\frac{\text{No. of Licensees}}{\text{in Division}}$

19. The logs which will be accepted for the multiplier under Rule 18 shall show at least five (5) contacts in the Contest.

20. The Trophy shall be forwarded to the winning State in its container and will be held by that State for a period of twelve (12) months when the winners for the succeeding year is determined.

21. The Federal Contest Committee shall be the sole adjudicators and their ruling will be binding in the case of any dispute.

SCORING TABLE

To

From	VK1	VK2	VK3	VK4	VK5	VK6	VK7
VK1	—	6	6	6	6	6	6
VK2	6	—	1	2	3	5	4
VK3	6	1	—	3	2	5	4
VK4	6	1	2	—	3	6	5
VK5	6	2	1	3	—	5	4
VK6	6	1	2	4	3	—	5
VK7	6	2	1	4	3	5	—
VK9	6	1	2	3	4	5	6

VK1 Amateurs operating from A.C.T. will be classified as VK2.

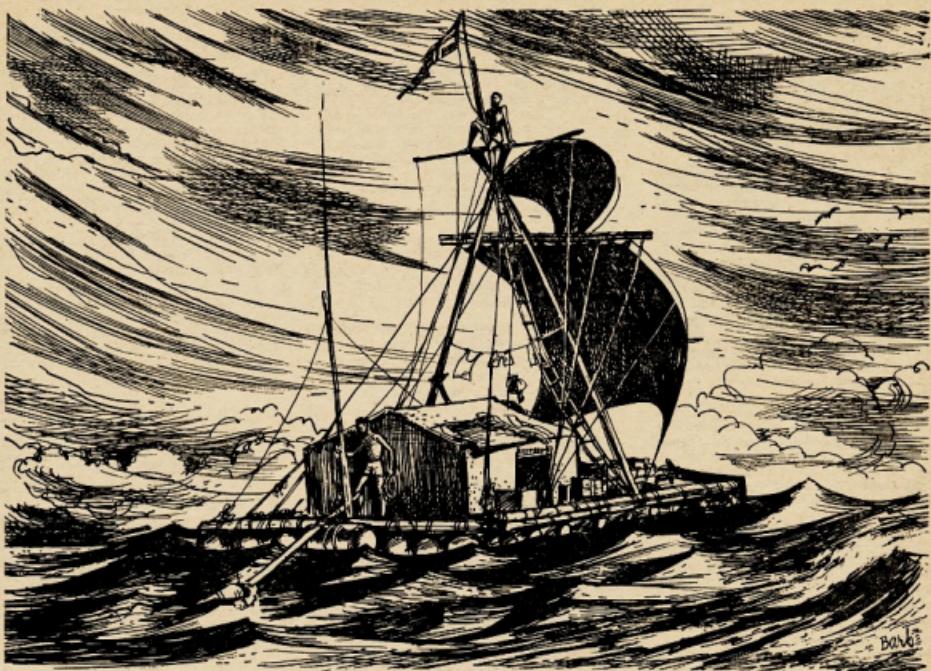
Note.—Read the table from left to right for points for the various States.

Examples:—

VK2 scores	1	point for a VK3 contact.
	2	" VK4 "
	3	" VK5 "
VK6 scores	1	" VK2 "
	2	" VK3 "
	4	" VK4 "
	—	—

ERRATA

In the article, "Building a Panoramic Adaptor," June, 1956, issue, the author has drawn attention to an omission of the values of resistors R21 and R22. They are 470,000 (or 680,000) ohms. Also in Fig. 3, R14 should have been "V" gain, not "H" gain.



101 Days at Sea . . .

THE expedition by six men on board the "Kon-Tiki" must be one of the most exciting adventures ever undertaken by man.

The 4,300-mile journey on the balsa-wood raft took 101 days. Their only contacts with the world were temperamental short-wave transmitting sets and secret sabotage sets used during the war.

From the outset the wireless operators had a tough job. A sufficiently long aerial was a problem. They attached it to a kite but it was promptly blown into the sea. Then they sent it up on a balloon which burst in the strong sun. Salt water trickled into the battery cases and, finally, their pet parrot ate the aerial.

But, in spite of these difficulties, the "Kon-Tiki" managed to keep in touch with several

amateur radio operators, including a Norwegian who lived near Oslo.

This was almost a miracle, considering the short-wave transmitter, with its 13,990 kc. a second, did not send out more than 6 watts — about the strength of a small electric torch.

Improved Techniques. Amateur radio men everywhere have benefited from scientific discoveries which have revolutionised radio techniques.

In SHELL laboratories special resins* have been developed from petroleum and are now extensively used in the manufacture of enamelled wires, insulating materials, and condenser sealers found in radio sets of every type throughout the world.

*Epikote resins



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VICTORIAN DIVISION

OLYMPIC GAMES ACTIVITIES

OLYMPIC DINNER

A special Olympic Dinner is to be held during the period of the Olympic Games in Melbourne, 22nd November to 8th December, 1956. The date will be announced in the near future.

STATION VISITS

For the special benefit of Overseas Amateurs visits will be arranged to a number of VK3 stations.

FIELD EVENTS

These events will be held in conjunction with Transmitter Hunts on one Sunday during the Olympic period.

Intending Amateur visitors are asked to get in touch with the W.I.A. office at 191 Queen Street, Melbourne, C.1, Vic., after their arrival in Melbourne. More detailed information will be published at a later date.

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AMATEUR CALL SIGNS

FOR MONTH OF APRIL, 1956

NEW CALL SIGNS

VK— New South Wales
 2GV—L. T. McLoughlin, Hunters Valley R.M.B.
 113, Ellerton, via Scone.
 2AEA—R. W. Allison (Dr.), 66 Constitution Rd., Dulwich Hill.
 2AOJ—J. W. S. Edge, Wallace Street, Cootamundra.
 2ASZ—R. L. Lear, Station St., St. Marys.
 2ZAP—F. H. Wagner, 18 Lake Rd., Swansea.
 2ZBI—W. A. Thomas, 52 Springfield Rd., Killara.
 2ZDD—R. H. Dell, C/o. Mr. S. Davison, Cunningham Plains, Cunningham.
 2ZDE—D. E. Woollett, 12 Broadarrow Rd., Beverley Hills.

Victoria

3DL—I. F. Amey, 14 Morgan St., Glenhuntly.
 3ET—R. D. R. Tracy, Station: Monash Rd., Olinda; Postal: 34 Docker St., Elwood.
 3KG—K. L. Green, 18 Clayton Rd., Balwyn.
 3AAI—N. K. J. Felstead, Lancefield Rd., Woodend.
 3AGA—M. N. Russell-Clarke, 127 Manningham St., Parkville.
 3AIR—F. B. Irson, Atkinson St., Templestowe.
 3ARG—R. E. Graemer, 21 Lyonsville Ave., East Preston.
 3AZO—J. A. Cunniffe, 21 Highview Rd., East Preston.
 3ZBC—J. T. Jarrott, C/o. Mr. L. Schulz, 159 Holmes Rd., Moonee Ponds.
 3ZBT—L. E. Thompson, 2 Eyeview St., Surrey Hills, E.16.
 3ZCC—N. R. Kay, 4 Curraweena Rd., Caulfield, S.E.8.
 3ZCD—D. G. Hawthorne, Flat 3, 11 Leopold St., South Yarra.
 3ZCL—M. A. Trail, 84 Argyle Rd., Kew, E.4.

HAVE YOU RETURNED YOUR
QUESTIONNAIRE YET?

3ZCU—J. T. Cunningham, 11 Catherine Pde., Frankston.
 3ZCZ—M. R. Osborne, 14 Brenbeal St., Balwyn.

Queensland

4LX—M. J. Wratten, Station: 6th Ave., Palm Beach, Elsmore; Postal: Clem St., Brassall, Ipswich.
 4OC—E. B. Connor, Cassowary St., Longreach.
 4QZ—C. W. Richardson, Hdq. North Eastern Area, R.A.A.F. Station, Camp Magnetic, Townsville.
 4SC—S. E. Brigg, 21 McKelligett St., Wandal, Rockhampton.
 4ZA1—L. F. Schmidt, 18 Marriott St., Coorparoo.
 4ZAJ—F. J. Edwards, 1 Market St., Warwick.

South Australia

5BT—D. G. Goode, Yankalilla.
 5GP—G. D. P. Clarke, Station: "Donnachaidh," 4 miles south of Narracoorte; Postal: C/o. R. P. Ender, Box 9, Narracoorte.
 5SB—D. R. Edwards, Station: "Murchison Creek," Fanny Bay, Darwin; Postal: C/o. Bureau of Mineral Resources, Box 499, Darwin, N.T.
 5ZAN—M. J. Goodridge, 63 Gray St., Plympton.

Western Australia

6RB—E. F. Robins, 148 McDonald St., Joondanna Heights.
 6RH—R. A. Hallamore, C/o. A.N.Z. Bank, 84 St. George Ter., Perth.
 6TH—T. H. Talbot, "Wedderburn," Brunswick Junction.
 6ZAX—W. G. Redden, 40 Raglan Rd., Mt. Lawley.

Tasmania

7BN—W. N. M. Nisbet, "Uneda," off Ormond St., Bellerive.
 7ZAF—T. G. Barnes, "Cottewold," Main Rd., Taroona.

Territories

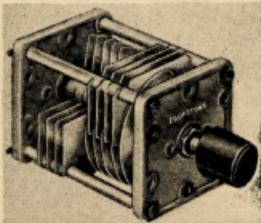
11J—D. R. Twigg, Macquarie Island.
 9AA—R. H. Harrison, C/o. R.T.C., Goroka, Papua-New Guinea.

C.W. BANDS: 3500-3550, 7000-7050,
 14000-14100, 21000-21100, 28000-28100

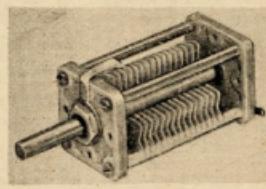
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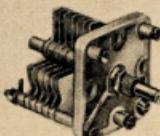
We will be pleased to show you the full range of Eddystone Condensers and forward a Catalogue on request.



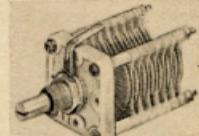
Cat. RS2—50 x 50 pF. max. Transmitting, 0.080 inch spacing, 2,500 volts.



Cat. 738—100 pF., 0.030 inch spacing, double end plates and bearings.



Cat. 813—66 pF. max. Transmitting, 0.018 inch spacing, 1,600 volts.



Cat. 587—15 x 15 pF. Butterfly Type, 0.052 inch spacing.

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Type "S", 240 volt
AC £25 0 0

Pye Power Supply, Vibrator type, 12
volt input, heavy duty £7 10 0

BC800B Transceiver, VHF, 16 tubes,
new £9 10 0

BC800A Receiver, 15 tubes, may be
modified to operate on 144 Mc.
Amateur band £7 10 0

Tail End Charlie, RT34/APS13, approx.
450 Mc., price with valves
Without valves £10 0 0

Test Oscillator, Type I.225, 150-225 Mc.
Wavemeter, Type SC164A, 145-235 Mc.
Signal Generator, Philips, 92.6 Kc. to
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Mike, Headphones, and 4 foot
Aerial Section £25 0 0

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receivers, freq.: 195-420 Kc. each

Amplifiers, VHF, two stages, CV66
grounded grid, approx. 200 Mc. £1 19 6

5BP1 Cathode Ray Tubes, new, in
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511B Cathode Ray Tubes, new, each
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The following matching equipment can also be supplied:

1. Transceiver Exciter Unit, 43.2 Mc. crystal controlled	£25 0 0
2. Three Channel Power Amplifier, 43.2 Mc.	5 0 0
3. 25 Watt Modulator Unit (P.A. only), in- cluding Plate Modulator Transformer P.P. 807 to 807	5 0 0

INDICATOR—TYPE 74

Type 74 Indicator Unit, modified to use as Oscilloscope.
3 inch tube. Complete with in-built Power Supply, 240
volt 50 cycles.

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6 volt operation.
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Complete with Power Supply, Leads, Mike and Head-
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12 or 24 volt in-built Power Supply.
4 fixed frequency channels (less crystals).
Frequency coverage: 4.3 to 6.7 Mc.
Nine Valves.

Brand new, complete with Headphones and Mike—

PRICE: £37/10/0

FIFTY-SIX MEGACYCLES AND ABOVE

NEW SOUTH WALES

On Sunday night, 6th May, immediately following the usual v.h.f. broadcast for VK2WI a 2 mx Scramble took place from 7.45 until 9 p.m. This resulted in 27 stations taking part and after reporting in the operator, Perce 2APQ, announced the second competition, being 1st ZANE 2Z, followed by 2JX, 2ZCZ, 2ZAV 19, 2ZAO, 17; 2ALJ, 2VL, 14; 2ABZ, 13, 2AU4, 11, 2ASA, 10, 2ZIC, 2ZBV, 8; 2ABE, 2YM, 7; 2ZAR, 6; 2ZCH, 2ZBR, 5; 2AFN 3. Ted 2XX was heard frequently during the night to get "contact" late as 9.05 and it is believed that he was successful in working Peter 2JX.

Wednesday, May 9, at the home of 2APQ was the first meeting of the newly elected management committee where responsibilities were placed on members as follows: Chairman, Perce 2APQ; Sec. and Treasurer, Bob 2OA; Vice Chairman, 2ZAV; Contest Manager and Field Day Organiser, John 2ATO and Horrie 3HL; Scribe for "A.R." Notes, Eric 2AFM. Plans have been laid down by this committee to ensure a good coverage of the various interests of 144 Mc. enthusiasts. Arrangements for a mid-month competition are to be discussed at the committee's next meeting.

Future VK2WI v.h.f. broadcasts on 144 Mc. are alternating each Sunday night at 7.30 between stations 2AO and 2ZAV and already these new WI operators have received very good reports. It is interesting that both 2OA and 2APQ have been heard commenting on the pleasure they now get from sitting back and listening to the broadcasts instead of transmitting them. John 2ATO has been requested to have his coil wound by sitting alongside his power supply. Bob says he does not like the smell. Horrie 2HL had better contacts with the fish than 2 mx during his mobile holiday at Sussex Inlet. A new 3 mx DX station has been heard around Sydney, so keep an eye on 2ZBK of Blayney, on 144.69 Mc. who is keeping nightly skeds at 7 p.m. with John 2ANF.

The usual monthly meeting of the V.h.f. Group was held on Friday, 1st June, where, in addition to the regular agenda, a general attendance was made and our newly elected President, 2APQ, occupied the chair. We were honoured by a visit from Doug 2ADS representing the Hunter Branch, and Phil 2ER. Present also was 2ASA, who is a new member claimed a station. For the projects for next 2 months in the Newcastle district are Bob 2KF, of Kurri, Harry 2YL of Cessnock. Also it is reported that 2GV at Barrington Tops will soon be looking for Sydney stations. We learn that Norm 2AKL was in Sydney on Monday night and will be back on Wednesday night. He is going North and ZL may also 2ASA is operating each Wednesday and Sunday night. A trip to the Griffith Radio Club was described to members at the meeting by Adrian 2HE who gave a very interesting talk on the activities by that club and especially how very popular the boys are for 2m activity. Stewart 2PL has expressed his willingness to become liaison officer for that district along with Hugo 2WH of Forbes. From northward we have received similar information that Ken 2ANU will co-operate. Rumour has it that 2ASB of Canberra is anxious to form a v.h.f. group and would like to hear from others in the district.

"Switch to Safety" was the title of a lecture given at the meeting by Arthur Mead (2AJA) who told a lot of good advice to Amateurs concerning the safety of their equipment. He showed and gave examples of good and had quality switches, power outlets, plugs, fuses, etc. Plenty of questions were fired and Arthur was able to answer to each one's satisfaction. He was very suitably thanked for his lecture by 2ZAR which carried the support of all present. 2AFM.

VICTORIA

The final V.h.f. Field Day for this season was also the most successful for the season. There was plenty of activity on both the 1 and 2 mx bands with a record number of portable stations out on the air. In fact all installations that had been booked out for weeks prior to the event. There appeared to be more portable stations operating on the band than there were home stations, which is a very gratifying state of affairs for a field day. Most had a very busy time, some on the day itself, others in the few minutes thereafter. There were nine stations operating with 1 mx gear. One contact was from 2ZAQ and 2ZAT at Arthur's Seat to 2ALJ on Pretty Sally Hill, a distance of over 100 miles. 2ZCZ, portable at St Arnaud, called in 2 mx and only made one contact with 2DX contact with 3V3S, a home station. 2ZCG, portable at Harley Hill, near Wonthaggi, was heard calling 5BC, but it is understood he did not make a contact. Others heard out portable were 3V2

at Kinglake, 2ZAD at Mt. Donna Buang, 3ADU at the Youyangs, 3IE at Ferny Creek, 3KD at Mt. Macedon, 3AV at Ceres Lookout, Geelong, 3KZ at Mt. Buller, 3GK at Mt. Buller, 3GK at Mt. Bungonia, 3GE at Mt. Coota in the Ballarat area, 3AV2 at Reservoir, and Len 3LN (the forgot which mountain he was on!).

Results are as follows—On 144 Mc. 1st was 3ZCG, 28 contacts for 2118 points; 2nd was 3ZBK, 34 contacts for 1889 points; and 3rd was 3ZAD, with 25 contacts for 951 points. There was only one 2 mx contact for 25 Mc. and this was from 3ZAQ with 2 contacts for 168 points.

TRS, of Albury, reports hearing 2BW on 2 mx on May 21 at strengths of 3 to 4. 2RS is still looking for Melbourne stations, his frequency is 144.14 Mc. and he transmits at 8 p.m. and listens at 3 past 8 most evenings. He is anxious to make contacts with stations in 2 mx and is particularly interested from the point of view of contacts on 2m. He suggests that perhaps anyone interested could drop him a line to arrange a sked. He operates on 3.7 Mc. for checker purposes. It is his intention that he will be making a trial down the coast about the middle of August and will be staying in Melbourne for a few days, so perhaps some of us may have the pleasure of meeting him in person.

There were 29 present at the last V.h.f. meeting to hear Mr. N. S. Feltseher's lecture on beam aerials. Mr. Feltseher, who is a Divisional Engineer in charge of the Radio Development Division of the P.M.G.'s Radio Research Laboratories, gave a general coverage on directional aerials. It was a wonderfully interesting lecture, but I'm afraid we have to admit that more than half of the evening was taken up with the Q and A session that followed. The fellows really made the most of this wonderful opportunity of being able to ask somebody who knew all the answers and also were fortunate in having in Mr. Feltseher somebody who was particularly willing to help them with their problems. All who attended voted it a most interesting lecture and went away a lot wiser.

HAVE YOU RETURNED YOUR QUESTIONNAIRE YET?

How are you going with your 100 contacts on the v.h.f. bands? The fourth certificate award has just been completed for boy 2ZAQ, who brought along his 100 confirmations to the meeting.

. There has been some good 2 mx DX during the past month. On 5th May, SBC came through with fair signals and was worked by 3PO in Ballarat and 3EQ on both phone and c.w. On 10th May, 3ZBQ was heard with signals so strong that anybody could have worked him in fact it was hard to believe that it could be SBC. Unfortunately, hardly any stations were listening on the band in Melbourne and only 3BC and 3CP made contacts with him on phone of course. The conditions lasted from a little before 8 o'clock till about 9.30 p.m. Before he made contact with him, 3EQ had been receiving very strong signals from SBC while he was in contact with 3ZCZ. SBC is on the band every night from 8 o'clock looking for Melbourne contacts. His frequency is 144.13 Mc.

Charlie 3BHZ is back on the air again from his new QTH in Boronia. Also Alan 3AKZ is back on 2 mx after an absence of six years. He is running a mod. osc. with a third of a watt from dry batteries. His signal is particularly stable. Ray 3ATN has a new shack nearly completed with a modern console desk which is looking very nice indeed. An 80 foot steel tower is to be a later addition.

The last fox hunt held on 2 mx was a very successful night all round. The weather was fine and mild, a very good crowd turned up and all made their contributions. The final results were at the home of Tom 2AOG and Vi Sawers in Essendon where the gang had their usual post-mortem and supper together. The winner for the evening was Eric 3ADU. Thanks are offered to Tom and Vi for opening their home to the gang.

WESTERN AUSTRALIA

A Field Day was held on Sunday, May 13, the first attempted by the V.h.f. Group. Stations were spread out through the south west as far as Albany. While the four hour show was only partially successful, a lot was learned which can be put to good use later on. The path to 6BO at Bumby was open all the time from Perth. Rojo worked 6ZAA, 6BE and 6ZAV at Kalamunda and Perth and 6AW at Bridge-

town. 6HK was worked at Brookton by 6ZAA, 6BE, 6ZAM and 6ZAF, after moving location three times, worked through to Perth from Northam, and 6ZD worked 6ZAV beam in a blow while in course of erection.

6ZAA, 6BE went to 6EJ's location at Bencubbin during school holidays (Jack and Rob have shown interest in 2 mx) and worked back to Perth through the three stations with 6ZD, 6BE and 6ZAV. Way may have a 144 Mc. 6WV at Bencubbin in the near future. Transfers have taken 6ZAA and 6ZAV from Meekatharra-country DX. Checks with Wally 6WV at Albany are in progress by 6BO and 6ZAV with varying success.

Cheers, a new station appeared on 2 mx the other day. None other than Frank 6FW. Frank 6FW should be on the band soon.

Another Fox Hunt was held on Saturday night, 2nd June. This was hidden by 6TR, 6HE, Don 6ZJ, Warren 6HK, 6VW, 6ZD, 6ZAF, the landmarks. Time 45 minutes. SBS 6SJ and AH 6EA came second. Congrats on the effort.

288 Mc.: Activity has been low lately. 378 Mc.: Don 6ZAV has a pair of RL1Rs ready to get going when time permits.—6ZAV.

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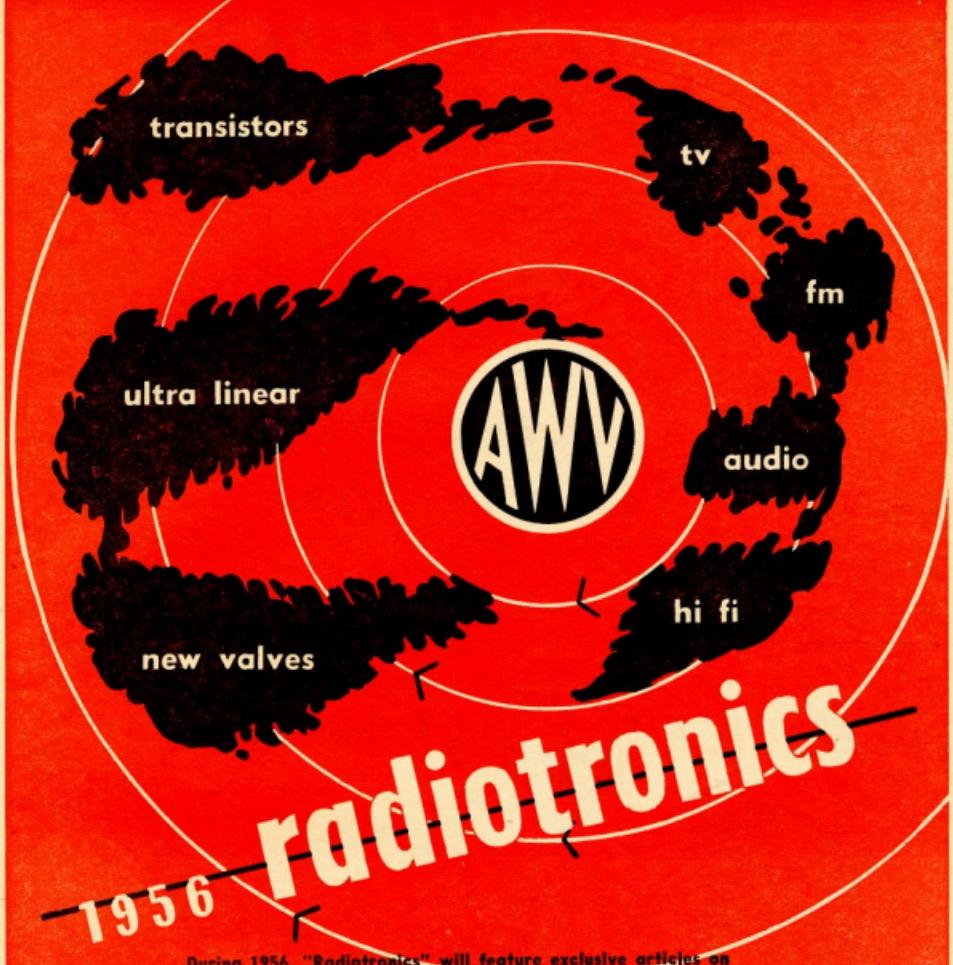
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AMENDED RESULTS

NATIONAL FIELD DAY

VK2ARZ, who was placed second in the c.w. section instead of third, pointed out the errors in the results published. The Federal Contest Committee hereafter will issue the necessary amendments. Apologies are offered to all concerned.

State Winners—C.W. Section

New South Wales: VK2WI (operators D. J. Pollard, VK2ASW; S. Bourke, VK2EL), score 46 points.

Open Section

No entries from VK4, 5, 6 or 9.

Logs Received—C.W. Section

VK7LJ 80 points, VK2WI 46, VK2ARZ 25, VK3ADW 25.

PARTICIPANTS' COMMENTS

The following letter was received by the Federal Contest Committee who suggest publication of same. If you have any ideas re this contest please let the Committee know.

We thoroughly enjoyed the National Field Day Contest although we did not have many contacts (being on c.w. only). We would like to make the following comments and suggestions for future contests:

(1) We think it should run 24 hours (6 p.m. Saturday to 6 p.m. Sunday) as one goes to a good deal of trouble for the contest and the times make it a bit of a rush. It would mean camping, but I think this would add to the fun. There would be greater opportunity for DX

contacts. Camping with radio can be a lot of fun!

(2) The scoring should permit working the same station on different Amateur bands (as in R.D. Contest).*

(3) The participation of overseas stations needs clarifying. Apparently they don't have to submit logs. Do they then have to exchange sequence numbers? We think that if the operations on the bands are monitored by officials in each State, nominated by the Contest Committee, to check and report irregular operation, the participants should be allowed to make overseas contacts without logs being forwarded and without the exchange of sequence numbers. In other words, the operator is put on his honour to include only bona fide contacts. This would render the overseas contact simpler and without the need for explanation of the contest requirements. If overseas stations are to exchange sequence numbers then much greater publicity is required. What a pity a world-wide Field Day Contest can't be arranged! We did not chase DX contacts (although we were often called by Ws) and those we did work we did not worry with sequence numbers.

(4) We think the contest rules should indicate the correct procedure in regard to call signs. We used VK7LJ/7, but many used the /P to indicate portable operation. The correct procedure was given in the Federal Notes in "A.R." a couple of years ago and if I remember rightly, specifies the /7, etc. I have meant to check this but haven't had

* Rule 6 covers this.

time. As a matter of fact it was my suggestion originally to the Advisory Committee as the /7 type is commonly used in U.S.A. at least.

(5) The contest needs greater publicity. The value of such a contest in proving the efficiency of both operators and gear for emergency purposes needs stressing. With a couple of Amateurs working in shifts at cooking and radio there can be a great deal of enjoyment. It is a good try-out of the efficiency of both personnel and equipment, particularly so if run for 24 hours. The battery situation is more difficult but not insurmountable. Real skill in choosing the right band for the right time is needed. I very much like the multiple operators idea allowed in the contest. It then does not come too hard on any one individual.

—Lon R. Jensen, VK7LJ.



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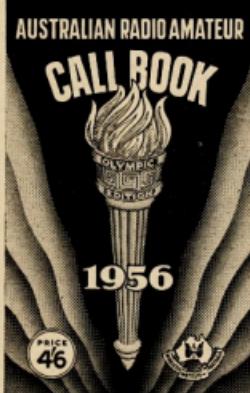
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FEDERAL, QSL, and



DIVISIONAL NOTES

FEDERAL

VK1—AUSTRALIAN CAPITAL TERRITORY

An interesting change in the call letters for stations operating from the Australian Capital Territory has recently taken place.

These stations will now be prefixed by the numeral "1" following the international identification letters "VK," instead of the New South Wales numeral of "2".

For the time being, Amateur Stations operating from Antarctica will continue to use the prefix of "VK1," but a review of this will take place at a later date.

AMATEUR ADVISORY COMMITTEES, 1956

New South Wales

Messrs. G. T. Bruce (VK2GZB), N. MacNaugh-
(VK2ZHH), R. W. Patterson (VK2AJW), L. C. Pinnell (VK2ZR), H. W. Wilson (VK2WV).

Victoria

Messrs. R. A. C. Anderson (VK3WY), F. O'Dwyer (VK3OF), N. Storck (VK3ZO).

Queensland

Messrs. S. R. Baxter (VK4FJF), J. G. Files
(VK4AJR), H. N. Bowman (VK5FM), G. M. Bowen
(VK5XU), R. S. Gurr (VK5RG), W. W. Parsons (VK5PS).

South Australia

Messrs. B. W. Austin (VK5CAI), G. M. Bowen
(VK5XU), H. N. Bowman (VK5FM), L. E. E. Brock
(VK5UZ), R. S. Gurr (VK5RG), W. W. Parsons (VK5PS).

Western Australia

Messrs. D. R. Cook (VK6AB), A. Hubbard
(VK6TA), M. H. Hurlburt (VK7TMH), L. J. Jensen (VK7LJ), K. A. Johnson (VK7RX),
T. F. Moore (VK7FM).

Tasmania

Messrs. D. H. Fisher (VK7AB), A. Hubbard
(VK6TA), M. H. Hurlburt (VK7TMH), L. J. Jensen (VK7LJ), K. A. Johnson (VK7RX),
T. F. Moore (VK7FM).

LIST OF SUCCESSFUL AMATEUR CANDIDATES

The following is a list of candidates who were successful in the examination for the Amateur Operator's Certificate and Amateur Operator's Limited Certificate held on 10th April, 1956.

New South Wales

G. Harriman, Farm 1850, Lake Wyangan, via Griffith.

D. A. Robertson (Mrs.), 20 Carrington St., Deakin, A.C.T.

J. E. Hughes, McKay St., Macksville.

A. D. Page, 65 Hassans Wall Rd., Lighgow.

W. B. Sibley, 187 Gloucester St., Tamworth.

L. B. Rumbler, Roslyn St., New Lambton.

S. G. Lloyd, 106 Main Rd., Cahibah, Newcastle.

L. E. Harris, 26 Park Ave., Wairata.

N. W. Kestel, Suite 306, T. G. & Bldg., Kingsford.

D. G. Wheaton, 373 Anzac Pde., Kingsford.

R. M. McLean, 127 Anzac Pde., Kensington.

S. W. Steinwade, 665 Anzac Pde., Maroubra Junction.

A. R. Hennessy, 23a Illawarra Rd., Bexley Nth.

L. J. Carpenter, Blackbutt's Rd., French's Forest.

Victoria

G. C. Trall, Box 77, Sale.

P. K. Bennie, 96 Stawell St., Sale.

B. H. Parker, 36 St. Georges Rd., Ballarat.

R. K. Bunting, 9 Fuchian St., Geelong.

D. Caldwell, 87 Panoramic Rd., Nth Ballarat.

P. J. Foster, 137 Thame St., Box Hill.

G. A. Hassell, 69 Hall St., Moonee Ponds.

G. A. Bowers, 82 Collins St., Melbourne.

A. J. McKean, 423 Pitt St., Essendon.

D. H. Goldsworthy, 1 Princess St., St. Kilda, S.2.

Queensland

N. H. Lawton, 50 High St., North Mackay.

R. E. Lees, P.O. Box 18, Theodore.

K. T. Robertson, 40 Price St., Belgian Gardens, Townsville.

South Australia

D. Barber, Electronics Section, A.G.W.T.U., Box 100, Port Pirie.

A. D. Cathro, Penola.

I. B. Wall, 34 Church Ter., Walkerville.

C. C. Poole, 38 Norma St., Torrensville.

R. H. Palmer, 226 Chamberlain Ave., Clarence Gardens.

R. J. Kreig, 81 Angle Vale Rd., Gawler Rail.

J. G. Rodger, 38 Lyngton St., Tusmore, Western Australia.

L. E. Gooding, Darkan, Tasmania.

S. G. Moore, 8 Pearl St., Wivenhoe, Burnie.

*Qualified for Limited Certificate.

The above list does not include candidates who, although they failed in the examination for a full certificate, qualified in the subjects for a limited certificate. Such candidates are issued with a limited certificate on application.

FEDERAL QSL BUREAU

RAY JONES, VK3RJ, MANAGER

Information on the radio expedition to Birds Island by the Radio Club Venezolano during the period June 17 to 24 did not come to hand in time for inclusion in June "A.R." This island, which is a "new" country, is owned by Venezuela and is situated 380 miles from the mainland. It is 150 miles from Los Roques to the West. Call signs of the station were YV3AA. QSLs should be sent to R.C.V., Box 2285, Caracas, Venezuela, and all contacts will be confirmed with a special QSL and banner.

A unique QSL sighted during May was that of JA1FO to VK4LW in confirmation of 59 Mc. contact on 14 MHz. In 1944 JA1FO used 10w. to 1625s, his modulation being 80% Ant. was a 4 el. gr. 2ft. high, and rx r.f. i.f. converter ahead of a 9 tube super. JA1FO states there are 860 stations in JA with 6 antenna rigs including 400 in JA1 and 156 in JA2.

The Radio Amateurs of Lebanon have formed a national society styled R.A.L. with address: Box 3245, Beirut, Lebanon. Foundation president is ODSAA and QSL Manager ODSBA with QSL Bureau address as above.

QSL Manager, please note the change of address for the Swiss Bureau. New address is U.S.K.A., Knutwil, Switzerland.

BERS195, temporarily located in Brisbane, is operating in warm weather but meeting Aussie rules football and having been told Collingwood advises that AP2M, JASHW and ORETA are desperately in need of VK cards for their many contacts. Check your log charts and make sure you have not failed them.

Appropriately, in this part in the column re Pat Lawton one of the two operators of CR10AA in Pat Lawton's information is now to hand that Pat is on the staff of D.C.A. at Darwin.

Cards through the Federal Bureau during May showed an increment of 230 per cent. reflecting the better conditions obtaining on the DX bands and the backwash from recent DX contests. The monthly total was the highest for five years.

Further to last month's reference to return of cards sent to 3W8AA in Hanoi, Austine VK3YV has advised that first card similarly addressed did not reach Phnom Penh but that a second card addressed to Postbox 1992, Hanoi, Vietnam, via Route Hong Kong, Canton, reached him.

Ex-VK1RF is currently to be heard under the call sign YJ1RF.

Congratulations to Austine VK3YV on obtaining the first YL-WAC-YL ever issued. Although Austine's certificate is numbered 11, the previous 10 were issued to males who had made WAC-YL.

FED. CONTEST COMMITTEE

The checking of the VK/ZL Contest logs has been completed and the results will be ready for the next issue. Due to the considerable lead-up the last from overseas contestants are late in arriving and checking could not start until May. Checking has so far revealed that there are many errors and the Committee de-

SILENT KEY

It is with deep regret that we record the passing of:—

VK2II—Max J. Moore.

VK5QP—Ken M. Theel.

VK5WG—Wally N. Govan.

cided that all overseas logs would be checked against the VK-ZL logs. A large entry meant a longer time before the Committee could release the results.

Following complaints that Certificates were being damaged whilst in the post, the Committee has decided that in future all Certificates will be sent in mailing tubes and has accordingly ordered a large quantity. There will then be no delay in the posting of the Ross Hill and Field Day Certificates.

Jim VK3FO and Reg VK3RR have completed the Record Book of all the rules and results of contests run by the W.I.A. and the Committee will be setting out on their task of cataloguing with the errors of omission and commission which seem to be inevitable, although unfortunate.

G. Bowen, VK3XU, Chairman.

NEW SOUTH WALES

Members of the New South Wales Division were particularly fortunate in their lecturer at the June meeting. Professor Yardley Beers, who is visiting Australia on a Fulbright scholarship with the C.S.I.R.O., would be better known to us as Yardley, 2WAER, the Yardley specialising in radio propagation and those strange things which we all know happen in the ionosphere (and the troposphere too) you will know just how much we all looked forward to his lecture. Professor Beers "Call me Yardley" divided his lecture between three of the most interesting subjects that it would be possible to choose from an Amateur viewpoint. He discussed rx front-end design and paid particular attention to the problem of local loop competition (have you a local loop in the shack) and the propagation of a relative merit of a.m. and s.s.b. followed and Yardley suggested his "Ultimate Modulation." If you reckon that s.s.b. is complicated, how would you like to tackle a suppressed carrier plus four (yes four) sidebands? There are some rather startling developments. As usual Yardley concluded with a discussion on an ideal antenna system that has set the boys really thinking.

As details of the business at the meeting will have been covered in N.S.W. members' already in the Divisional Bulletin, I will not repeat it here.

The holiday week-end of June 2-4 saw quite a gathering of VK2s at the Queensland Convention held at Burleigh Heads, just north of Gold Coast. From 2W1 to 2W4, 2VQ and 2QD McCauley attended for the bulk of the Convention.

2R2K and 2ZY arrived on the Sunday, with 2V2 from Tweed Heads. Divisional President (N.S.W.), who seems to be a part of Queensland activities these days, breed the enthusiasm to go to the Convention, and 2AW and 2VQ reported from Sydney. Though I would like to put you in the picture regarding Jim's opinion of the "Sunny Queensland" weather, I am afraid that the censor may have to "edit" those notes. If I do so it appears that it was quite nice, on Sunday at least. By all reports it was a really grand show, and Ramsay and company are looking for takers for the next one. How did you find the bottle of medicine, Ramsay?

My spring, which is still in its early stages, has received a couple of items from the city blokes. Firstly, I am informed that the strange noises to be heard around 3700 Kc. some evenings are not splatter, or even some curious radiation from behind the iron curtain. Don 2AW and the Provincial Councilor for the Division, Mr. G. J. McLean, last found time to finish that s.s.b. rig. It has taken a long time, because his building programme has had to take a back seat, to allow for his Council activities over the last three years. Don would appreciate some comments on the opportunity to see just how good that rx of yours is!

Two rather remarkable pieces of mobile operation at 7 Mc. were noted early last month. 2ATW/M and 3AHT/MV2 both had good phone contacts with VK1RF, the last being 1000 miles. As both mobiles were around the SW marks, I am sure you will agree that's a very good effort.

Now, just a few words on the subject of these notes. Your scribe, 2EL, would appreciate news from any member. If you are in the country, or in the city, or in the country, or whatever, will be very pleased to hear from you. If you are not keen on writing of your activities, how about letting us all know about the doings of others in your town or area? This is the other side of the coin, and of keeping up with other country Amateurs and avitvites unless we contact regularly. News from the city is of course also very welcome.—2EL.



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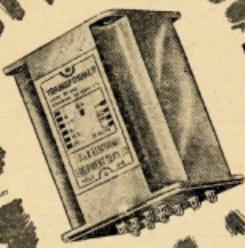
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HAVE YOU RETURNED YOUR QUESTIONNAIRE YET?

SARY, Ray 3KD, Ray Price, Bob 3QJ and Herb 3JO journeyed up from Melbourne for this event; Len himself in his role of Brer Fox and how. This started at 3 p.m. The outright winners were Bob 3QJ and Herb 3JO, the Stevens brothers who were S.A.R. President respectively of the V.h.f. Group. Congrats, boys, we benefited by the run and hope to have a go at you once again.

We would like to thank the Melbourne chaps who came up also the organisers who were David 3DV, Bert 3BB, Ian 3AAV and Bernie O'Reilly. Thanks a lot chaps for a wonderful job. It was a most enjoyable week-end and we are looking forward to the State Convention when we hope to see you all again—3AKW.

CENTRAL WESTERN ZONE

During the past few months some members of this zone have been actively engaged building new high power rigs. Merv. 3AFO now has a rack and panel job which covers the DX and the 70 cm. band. Power output 100w. to a pair of 807s. He is using a Type 5 converter supplied recently obtained through disposals. Trevor 3ATW is now using a band-switched rig built into a cabinet and using an 813 in the final. Alan 3AAZ has stuck to the popular 40w. combination in his new station. Alan 3ATW now has all his gear running off the a.c. generating plant which he has recently installed. Chas. 3ID is now working on c.w. with the pair of 6146s which he has put in place of the 813. He is using the modulator portion of the screen modulating system.

Keith 3AKP is still busy constructing and hopes to be on the air in the near future. Bill 3AWK is at present finding bits and pieces for a new 20 m. rig to operate on the 40 m. band. Bill will construct a 12AS 20 m. oscillator, another 12AS will be modulator. Power supply will consist of vibrator and 6X5 as rectifier. Congrats, go out from us all to Keith 3ATW and his XYL Oliver on the arrival of their first baby. Perhaps the back door will be closed against you for while Keith, but hope it will not be for long—3AKW.

SOUTH WESTERN ZONE

The zone is fairly active, particularly on 144 Mcs. 3XI has his rig going very well now he has a new cubical magnetron approx. 85 Mcs. from the ground and is working out quite well. Norm. 3EQ is getting steamed up to remote control his rig from the lounge room as it is cold out in the shack. Neil 3HG, of Colac, is now on a.c. so you most likely be on the bands a lot more. John 3AGV is still getting all the gear set up in this new home. Geoff Clarke (3DF) has been at 3AGD's for a few week-ends, but seems to be hard to get to the mike, not shy I hope. Geoff, S.W. Geoff Morris has been engaged from the National Service as the new health inspector, so whenever we wish you luck, Geoff. We hope to have a visit from one of our ex-zone members, Bert 3BL (of Ballarat). Bill Wines and XYL have been on holidays in Geelong, Melbourne and Ballarat.

Ian 3BU has made a new rig which is putting a better signal out now. 3AGV, of Colac, has returned from Wangaratta; he visited Jack 3AKC, one of our old zone members. Gordon 3AMZ was on holidays in the Grampians and was nearly caught out in the floods, that's no good Gordon. Mart 3AKU is busy working on a compass rx as Qser. Chris 3AXU has installed a heater in the shack. Chris had a visit from Keith 3LX, who, using an old mobile rig, worked 40m. outside the front of 3AGV's shack. Don 3PO and Ballarat, seems to be the only one up there on the bands, particularly 2 m. Well chaps I hope you all have your photos of the Convention held at Warrnambool, if not please drop me a few lines or contact Harry 3X1—73 Bill Wines.

NORTH EASTERN ZONE

Frank 3ZU is now back after an interesting holiday in VK. Kevin 3JR has left VK and is now in Melbourne. Ian 3AGC is back on the air again after a power failure. Brian 3AMZ still tied up with his studies. Howard 3VY has his rig going nicely now, and Jim 3JK is doing well with that beam on 10m. and 20 m. Jack 3M is now back in the "fold" of radio. Bill 3JP, Keith 3DW and Ken 3KX were heard checking their rigs on 40 m. recently. It is thought that Hugh 3AHF is back from his holidays. Don 3CO is back from Goodoongiwindi. Syd 3CQ has got an interesting selection of colour photographs as a

QSL from a W4. Keith 3JC worked Doug 1IJ down on Macquarie St. George 3GK is thought to be on the DX band. Jack 3AKC is moderately active, and Peter 3ABF sticks mostly to the v.h.f. bands. Ray 3FI still building that new shack. Brian 3ASF and Bruce 3AGG are chasing 20 m. DX. Les 3ALE is active. Vern 3AXW has recently shifted his shack from the back verandah to the front, but our former member Col 3WQ is still not in his own house. A visitor, Gordon 3AGV, had quite a bit of gear with him on his holiday in Wangaratta.

Of our Associates, Earle Sconce is back after the recent cyclone, and Peter 3ABF is not active. Peter 3ABF has not been heard of lately, and Jack Dunne is experimenting with model aircraft. Allan Holmes is constructing one of those tri-beams and our enthusiast friend John Brougham 3TR is active. Les 3ALE is early in May. The North Eastern Zone Convention will be held in the Anzac Rest Room in Station Street, Seymour, on Sunday, 8th July next. The caterers is "bring your own tucker, tea, milk, and sugar; hot water will be provided."—3FD.

GEELONG AMATEUR RADIO CLUB

The v.h.f. field day held recently was of keen interest to 2 m. enthusiasts in this district. Many stations were worked by 3ZAV and 3AWZ. Peter 3ZAV was stationed on Ceres Lookout and logged about 15 stations. Some of the more active stations worked at the station were 3ZBZ, 3WE, 3ZAD and 3ADU. Bill 3AWZ visited Eric 3ADU who was portable on the Yarra Yangs and saw some fine DX worked at the excellent location. A 1 m. contact between 3ADU and 3AVW was the only signal heard here on this band.

Bill 3WT and Bill 3BU are not back on deck yet after illness. Our Secretary, Bob 3IC, has returned from a motor cycling holiday to Adele-ville Mildura. Bob was equipped with his portable radio and contacted and visited many old friends.

Recent disposals evening raised members from hibernation and a satisfactory time was spent by all. The club has benefited considerably. It is time to have the first meeting of the S.W. Zone Convention completed and posted to members soon. Don't forget chaps, club members here will be listening and transmitting on the hour on Sunday afternoons from 3 p.m. onwards and would be anxious to exchange news and views—3AWZ.

QUEENSLAND BRISBANE AND DISTRICT

The past month has seen quite a bit of activation in Brisbane. The 3A Beach Convention was a success and full details will be published, possibly in next month's "A.R.". The official station, VK4WI, is now well settled in its new home at Wavell Heights and should be quite active by the time you read this. Bert 3AK has put a terrific amount of work into the GOSs and is on the last piece of work now. He has modified the tx's for "press-to-talk" and will be able to operate simultaneously on two bands. One suggestion by a country member was that the normal 20 m. and 40 m. broadcasts be made on Sunday mornings as

Wireless Institute of Australia Victorian Division

A.O.C.P. CLASS

commences

THURSDAY, 26th JULY, '56

Theory is held on Monday evenings, and Morse and Regulations on Thursday evenings from 8 to 10 p.m.

Persons desirous of being enrolled should communicate with—Secretary W.I.A., Victorian Division, 191 Queen Street, Melbourne (Phone: MY 1087) or the Class Manager on either of the above evenings.

C.W. BANDS: 3500-3550, 7000-7050, 14000-14100, 21000-21100, 28000-28100

usual with a repeat on 80 m. on Sunday evening. Bert said that he will try to do this and if nothing unexpected happens we know he will.

When he has completed modifications to the keying circuit he will possibly be conducting radio shows on the 20 m. band. The hobby of the "Z" boys who want copy to get full tickets and for associates who need that morsel. Bert has an excellent "list" being the holder of a first class operator's ticket and really wants to pass it on to the Yester. You may realize the position he is in as he's taking on this work while he is "snowed under" with work on the completion of his home. He is even using part of his lunch hour at work to do work on the GOS. Can anyone beat that?

You have all received the Questionnaire in the June "A.R." and Council suggests that you fill it in and return it to the Box so that the forms can be sent to F.E. Unless F.E. knows your views on the proposed changes to the 2 m. band, they have not tried. So let's have those filled-in Questionnaires.

As you have probably heard, the UA Hams are now permitted to work VKs again and Tibby 3WT had quite a good QSO with one of the Russells on 20 m. DX. Now possibly some of the boys will be able to get QSLs from Zones 16, 17, 18, and 19 for that "hard-to-get" W.A.Z. Certificate.

Recently a lady rang your Secretary at work and, thinking it was her XYL, he said, "My private life is taken care of by a silly, sulky, twisted girl." The lady sputtered and demanded that she only wanted to know if the W.I.A. wanted the State Service Union Rooms to be booked regularly each month and that she was a "sensible girl." A hurried apology and explanation answered her and we are pleased to say that we still have the State Service Union Rooms for our general meetings. How red can a human face get?

Why is the top 30 Kc. of 20 m. so vacant? Everyone is taking up the lower end of the band and neglects 14200 Kc. to 14500 Kc. What a wonderful case the commercial interests would have if they tried to get another 50 Kc. from us. "The Hams don't use that 50 Kc. from us." "Give it to us and we could go over in a big way at the International Telecommunications Conference, which is coming up soon. So, if you don't want another 50 Kc. taken from us do something; use your bands or you know what will happen.

The 3A Beach Convention reported last month. It gone even further. The JA station has broken the record of Okinawa to Chile with Japan to Chile. Although a signal of a couple of hundred microvolts is necessary to really chop up v.h.f. propagation in the city area, in the country areas those JA signals would have really caused havoc to viewers. The authorities realize the mistake they are making in taking 6 m. from us or has the decision been made by non-technical persons? We don't want another 50 Kc. taken from us, and we all have a vote and have the right to approach our members of the House of Representatives. If a Ham in each Federal Electorate has their Member about this break through of DX stations, the band is to be used for t.v. channels, things would happen and a lot of questions would be asked.

The personal pars are short this month and we have had to ramble on. Fortunately, both your scribes are active on the bands now so you will get a good swag of personal pars next month. 73, 42M and 4PR.

MARYBOROUGH

4AI been on holidays and too busy to finish half-completed projects such as v.f.o. band-switched exciter and 2 m. mix converter. 4CB still has his 10 m. beam and has added another four elements to his beam, making it 16. Works better than 13 el. Yagi. Archie is spending a lot of time at week-ends on his tower and much welding has been done. 4BG had his skunk chipped and his antenna meter fell off and his good friend, a sympathetic friend of 4BG and 4AI agreed that the shelf should have been higher. In retaliation, a terse verse has been penned, see this—

An multimeter fell down hard
And the Rov on the dome
But due to his resistance
He re-voleted at staying ohm!

4BG called on 4BJ at Bundaberg and found Vic working much DX on 15 m. with a 40 m. dipole. Ron tried the same idea and is doing much better on 15 m. as a result. Is getting much better on 15 m. with a split-stator condenser, and getting results—4BG.

SOUTH AUSTRALIA

The general meeting was held in the usual rooms in Waymouth Street on Tuesday, 8th, with the President, John SKX, in the chair. After welcoming the visitors, Messrs. Bedford, Paul, Gooch, Williams, Crawford, Masted and Woolnough (SWB), John introduced the first of the three lecturers for the evening. Ian S2AA, took over before a bumper crowd who had come expecting some good "gen" from the members of the T.V.I. Technical Committee.

Ian had chosen, to present to the chaps, the relationship of our Amateur bands to the allotted t.v. channels. With a carefully compiled list of data on adjacent channel interference and harmonic relationships, Ian had the form of graph which was projected on to a screen. Ian suitably prepared the ground for the two lecturers who followed him. As I hope to have this material for publication in "A.R." later, I won't dwell on it here—as one remarked afterwards, "Crikey, it's a wonder we're not more interested!"

Others told me that this section was rather telling. Ian can speak with authority on these matters as he is right in the middle of t.v. rx design at our local industry.

Phil S2AB then took up the threads and in a lighter vein proceeded to outline some of the don's, such as using triodes instead of pentodes, high power multipliers, capacity intercoupling, etc. These were punctuated with shots from "QST" with Jeavies in suitably compromising situations. Phil stressed particularly the use of tetrode and pentode type transmitting valves such as 807, 803, 613, 614, 616, 620 and 629 with their low drive requirements, high transconductance, low plate-grid capacitance and low cathode lead inductance; the choice of a high starting frequency in the crystal oscillator or v.t.o. to reduce feed through at each multiplier stage, up to 12 Mc. with suitable oscillator circuits.

The Chairman of the Committee, Ray SBT, then carried on with some practical ideas for modifying our present tx by using double tuned coupling between stages. These can be suitably overcoupled and tuned to result in an attenuation of unwanted frequencies by 45 db. approx. and have the advantage of plug in coils for load changing, with no tuning required for "speaking" the stage. Ray paid a tribute to Hans Ruckert (2AOU) for the very able and willing way that he had assisted the VK5 Committee in preparing for their trials.

The two lecturers had given me a synopsis of their lectures. I won't go into the technicalities any further here. The President then called upon Les SAX to propose a vote of thanks to the lecturers.

QSL cards were distributed by George 5RX and Joe SJD, after which a "smoko" was allowed.

Memos were received from F.E. asking for the co-operation of all in returning the Questionnaire on 144 Mc. and on the change in the Regulations relating to portable operations. This latter is a distinct advance and we should see some improvement in field activities when it is today. It is a good deal better than it was today. ("Snow in there hills, Bo!)

Classes are drawing to a close and already we have applications for another one to be formed. If you know anyone who is interested (the class will be on the same basis as for the 1935-36 one), please let them apply as soon as possible so that the Council can make an early decision. Bruce SOR, who has been taking the morse class this year, has offered to continue with an advanced tutorial if there are enough offering to make it worth while. Anybody find a guru? OM.

Geoff S2AY has been awarded a travelling scholarship and will be residing in the States for the next couple of years. Our best wishes for a profitable sojourn, Geoff.

I have to report the deaths of two old-timers, who although not current members of the Institute, still belong to the ranks. Ken SQP died after quite a serious illness, and Wally SWD suddenly. The Institute extends sincere sympathy to their families.

NORTHERN AREA

Tom STL still battling along at Alice—plenty of excitement in the old place last month, though mostly minor. Still working a slow morse service job on 80 mx (315 Kc.) with the slow morse session. Occasionally hear Don 2AMN at the Barrier who still has his heart in the happenings of the VK5 Division. Is always glad to have contacts with his old mates STL and 2AMN.

"A.R." will be nice to see what a fine bunch of good looking so and so's there are in the Club. Worked Ern SEN, Bob SRI, Compson SEP, Les SAX, Ron SAP, Rex SUF, Austin SWO

last month. All had S9 signals and reported various activities from chasing DX to attending to beams.

EYRE'S PENINSULA

Wally SDF still active on Sundays. Had a good line-up one week—SBF, SDF and SEF in the one net, only needed Scott at Strath with SAF to make the quorum. Heard by phone with that Paul SBT was soon going to hear and hope that when you are reading this you'll be well again. George SEC still trying to get a holiday from B.C.A.S. job at Ceduna. Haven't heard a word from Whylla for months but still check in log. Still gathering up your old stuff and keeping SFE on the air; at least on the DX bands. Always include Dave SBF at Yankalilla in this section as Dave is a lone wolf down there by himself, mucking around with vee beams and 600 ohm trans-mission lines.

SOUTH EAST

Bram SAB has been coerced onto 15 and 10 m. by Doc, and is having the usual flock of trouble feeding power to his vee beams. Since these types of antennae are not in common use in hamdom, very little data is available in handbooks. We could really do with a good practical article on the matter, maybe take a look. Try some stubs, Bram and see what happens.

There has been very little activity at the Mt. Gambier area during the month on the bands as everyone seems to have some interest or other besides radio. Col 5CJ and Leo S2AG have building projects under way. Leo is planning to get his 100' tower up as he is getting married soon. Stuart SBS has had a few dints put in the new car—better go back to radio and leave the car in the garage, it may be safer! Stuart is looking for some new tubes to get his gear 100 per cent before the R.D. Contest. John SFD still showing no interest—only the weather seems to be getting him down. Charlie S2H didn't get to the meeting as he was heading for Melbourne the next day. Erg SKU hasn't put the rig on either, awaiting a new xtal insert. Should make a better showing in the R.D. Contest this year if the beam withstands the weather.

And now some famous last words. This is my finale with the notes. It has been a very pleasant experience and I sincerely thank those who have sent notes and kind words of encouragement. However, Jim SJD, who has done sterling work on your Federal Councillor has had to resign with a good deal of regret, due to his present "breath-winning" on the seas and Council last night saw fit to appoint me to that office. I will be happy to continue the tradition of this office with that of the Federal Contest work and here I shall have to leave on the notes. For anyone who can have fun with a pen in their hand I can thoroughly recommend the position of scribe. It's certainly wonderful what the imagination can do!

The new Green-board Certificates are in the hands of the R.D. and are ready to be forwarded to all claimants—there are 100 so don't rush those wheel-chairs along you old gexers with the glorious "vandykes." So long—I'm off to pick up me crutches from the Red Cross!

—73, Gordon SXU.

TASMANIA

NORTHERN ZONE

These notes cover two months' activities as I have been holidaying in the Eastern States since early May, so if I am rather out of touch with members, that is the reason. However, I hear that Col 2LZ has been so busy fun on what was left of the old 6 m x band and 5 m and from all reports he was not alone. Congratulations to Peter TPF and Max TCA, who both are now proud fathers of bouncing infants. In Peter's case I believe the new international record will fill the bill nicely as he will now answer to the call VK7 Papa Fox-trot! It is quite possible that Amateur Radio activities from these sources will be strictly curtailed for some time.

During my tour through the three Eastern mainland States I operated mobile and had some really interesting contacts with all VK States except VK6. A night sked with TPF was held without exception as far north as Tamworth on the journey northwards and from Grafton on the southward journey. The fortitude needed to meet so many Fellowes but that did not permit me to honour all invitations. 3MH please note! I couldn't find you in Melbourne—it's a big place! However, thanks to 3KR and 3DW in Benalla so kindly provided me a place to "hang out" etc. to "operate" on the tx while in that town.

Most other members appear to have hibernated for the winter, but more news may be forthcoming next month when I will be back in harness again.—7LX.

CORRESPONDENCE

The opinions expressed in these letters are the individual opinions of the writer, and do not necessarily coincide with those of the publishers.

INTRUDERS

Editor "A.R."—Dear Sir,

Again, what have we brought into, we who like to light the fires for the switches and talk of friends? Are specific reports of QRM to determine the lawful daily use of frequencies? If so, what is the purpose of band allocations, and why should not Amateurs migrate to, say, 10 or 100 megacycles as they think fit?

Doubtless important for power is power, expressed in other than electrical terms, but those who would add conditions to the "intruder" problem should be reminded that they demolish any civilian argument against such a move by Amateurs.

—"CAVEAT VENDOR."

FLYNN OF THE INLAND

Editor "A.R."—Dear Sir,

Relative to your June issue, page 7 in respect to the article on Flynn of the Inland. When I was in Adelaide during the time that the Rev. Flynn was starting his movement, I received the very first message I ever sent over the radio to him. It was a short one about amateur radio equipment and were camped at Innamincka. I took their very first message and it was with the then S.A. Radio Inspector's permission, printed in the Adelaide "Advertiser." I do not know if you can cannot tell you this. My name is Flynn in Flynn's address and there are also several names of enthusiastic Amateurs who, like Flynn, have now passed on. My call sign then was 5RM and 5BK. The Radio Inspector was a Mr. Harrington. I am pleased to know the service has expanded. The time of which I write was long before any regular station was set up.

—R. BARKER, VK7RM.

HAMADS

1/- per line, minimum 3/-.

Advertisers under this heading will only be accepted from instant Members who desire to dispose of equipment which is their own personal property. Copy must be received by 8th of the month, and remittance must accompany advertisement. Calculation of cost is based on an average of six words a line. Dealers' advertisements not accepted in this column.

FOR SALE: S.W. Rx 6BA6 r.f., 6AE6, 6BA6 i.f., 6AL5, 12AT7, 6AQ5, on 11 x 8 chassis, 12 x 8 panel, covers approx. 3400-8000 Kc. with Eddystone 100/1 dial and miniature plug-in coils; controls comprise r.f. i.f. gain, a.f. gain, b.f.o. note, l.t. n.m., a.v.c. switch, ant. trim, r.f. trim; 3" speaker and "S" meter (see "A.R." for May) mounted on panel; wired for separate power supply with 12v. l.t. and 250-300v. h.t.; all valves and most parts new and cost more than the price of £15. 12v. Vib. P.S., if required, 53/- Terms in Tas. J. Oliver, Latrobe, Tasmania.

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SELL: BC342N receiver "QST" mods. 230v. auto transformer, £40. Labgear wide-band multiplier unit, 3.35-30 Mc. £5/10/- Wearite Type A tape deck, input, output transformers, oscillator coil, offers. A. K. Head, 3 Annadale St. Kew, Vic.

WANTED: Eddystone "750" Receiver. K. Semmler, Murtoa, Victoria.

WANTED TO BUY: "QST," September, 1942. R. Graf, 18 Harrison Street, Ringwood, Vic.



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FB 3711

TV for the Amateur

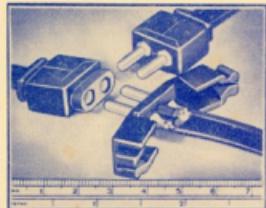
Plugs & Sockets for TV Aerial Terminations by BELLING AND LEE

Plugs and Sockets for Twin Feeder



L731/P—Free plug for twin feeder.
L731/S—Fixed socket.

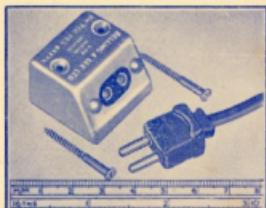
These inexpensive plugs and sockets were designed for use with unbalanced screened twin feeders as employed in television and short wave installations. Accepts either 150 ohm feeders. L733/J—Free socket. This is similar to L733/P, but is fitted with socket inserts as in L677/J.



L733/J—Free socket.
L677/P—Free plug for twin ribbon feeder.
L677/J—Free socket.

Designed for use with 300 ohm unshielded twin ribbon feeder as used for short wave work and television. The insulation is retained in the spines on the solid pins and the "butterfly" type moulding folds over the feeder.

Special slots grip the cover over the cable conductors. Interchangeable with L733/P and /S, and L739.



L739—Outlet socket box for 80 or 150 ohm feeder.
L791—For 300 ohm feeder.

A skirting board termination for unshielded balanced twin serial feeder. L733/S forms the outlet socket which will take L733/P or L677/P.

Co-axial Outlet Sockets



L735—Outlet* star box.

An improved surface mounted primary for skirting board of television. Will accept either free plug to 150 ohm. The appropriate range, L733, L734/P and L781.

This box is also suitable for certain laboratory and test bench installations.



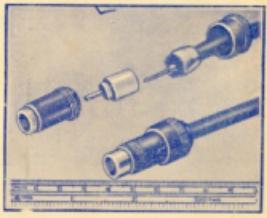
L763—Double outlet box.

This box has two standard outlet sockets and is complete with a "star" matching network which provides the coupling between the incoming cable and the outlets. When two receivers are connected, the input to each is taken down on the input to the box. Designed for use in demonstration rooms, workshops and laboratories, etc., or where neighbours in semi-detached or terraced houses wish to share a television aerial installation. The appropriate range of plugs is listed under L1329, L734/P and L781.



L734/P and L1329—Standard free plugs.
L734/S—Fixed socket.

Co-axial Outlet Sockets



L781/P—Free plug, insulated.



L734/J/AL—Free socket.

Belling and Lee range of plugs L734/P, L781/P and L1329 conform to the draft R.E.C.M.F. Specification for television inlets. In addition to these requirements they are also designed to meet the following recommendations for correct loading. In L734/P and L781/P the pin is retained in the insulation. L1329 has a hinged moulding to enable the pin to be withdrawn for soldering and/or crimping.

Complementary sockets for above range of plugs are L734/S, L604/S (fixed) and L734/J (soft).



L616—Adapter.
L616/S—Fixed socket.

A particularly useful application is for the aerial input circuit to car radio installations. The connector is designed to take for this purpose loads perfectly into this lug. The sockets are suitably designed to hold the plug against vibration and are cadmium plated.

The fixed socket L616/S is the complementary mating member to our co-axial plugs. A flush mounting type, L734/S, is also available.